This listing of Claims will replace all prior versions and listings of claims in this Application.

Listing of Claims

Claim 1.   (PREVIOUSLY PRESENTED)   A device-specific, physical and optical dot-gain reducing method for multi-level color-image halftoning regarding the output of a selected color-imaging multi-level halftone output device with respect to which individual pixels within a dot may have different intensities, said method comprising

based upon observed pixel-infeed-to-(multi-level)halftoning-pixel-output operational characteristics of such a device, creating a pixel-and-color-specific dot-gain reduction curve which relates, as data points for each output color of the device, selected corrections in device per-pixel pixel infeed intensity to different pre-selected, specific, multi-level, halftone geometric dot patterns of plural pixels including a contained subject pixel which is to be output from the device, where those dot patterns include a predetermined geometric pixel arrangement possessing (a) a central pixel, which is the mentioned subject pixel, and (b) the presence or absence of a defined collection and geometric distribution of immediately neighboring pixels, and further where those patterns collectively represent the halftone dot-pattern population characteristics of an expected multi-level, per-pixel-intensity-corrected, halftoned color image which is to be output by the device,

at a point in the image-processing flow of a stream of color-image pixel data which is upstream from the region where color-image device outputting takes place, and downstream from where multi-level halftoning of that data occurs, and for each pixel in the data which is to be

output ultimately to become a color-visible pixel, determining in which pre-selected multi-level, halftone dot pattern that pixel effectively lies and is associated as the contained subject pixel, and the output color intended for that pixel,

relevant to said determining, and in relation to such a determined halftone dot pattern, appropriately applying to the associated, contained subject pixel, as the sole physical and optical dot-gain-reduction instrumentality, the created dot-gain reduction curve, and

by said reduction-curve applying, reducing both physical and optical dot-gain contributions of the subject pixel in whatever multi-level halftoned image is associated with that subject pixel.

Claim 2.   (CANCELED WITHOUT PREJUDICE)

Claim 3.   (PREVIOUSLY PRESENTED)   The method of claim 1, wherein each pre-selected multi-level, halftone dot pattern takes the form of a three-by-three matrix of pixels.

Claim 4.   (PREVIOUSLY PRESENTED)   The method of claim 1, wherein the selected output device is a multi-level printer, and said creating is based upon densitometer inspections of such different pre-selected multi-level, halftone dot patterns which have been printed by the printer as a group of plural, next-adjacent, same patterns, and wherein further, with respect to each such densitometer-inspected pattern, data points used to create the mentioned curve are determined by comparing (a) densitometer-perceived percentage-of-coverage readings that are

taken of the printed output pattern with (b) the idealized geometrical-percentage-of-coverage of non-white pixels in the pattern.

Claim 5.   (CANCELED WITHOUT PREJUDICE)

Claim 6.   (CANCELED WITHOUT PREJUDICE)